Form 3160-5
(November 1994)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires November 30 2000

c/sp

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NM-01165

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
YATES FEDERAL 18

2. Name of Operator
Marathon Oil Company

9. API Well No.
30-015-30828

3a. Address
P.O. Box 552 Midland, TX 79702

3b. Phone No. *(include area code)*
915/687-8356

10. Field and Pool, or Exploratory Area
BURTON FLATS MORROW

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
660' FSL & 1980' FWL
SEC. 18, T-20-S, R-29-E

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Coommpleted Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

PURSUANT TO THE NMOCD 4 CASING STRING REQUIREMENT FOR SURFACE WATER PROTECTION, MARATHON PROPOSES THE ATTACHED PROGRAM FOR CASING & CEMENTING.

RECEIVED
OCD - ARTESIA

Minimum Required Fill Of Cement Behind The 5½ Inch Production Casing Is Sufficient To Tie Back 600 Feet Above The Top Of The Bone Spring At Approximately 5693 Feet.

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
R. J. LONGMIRE Walter J. Dueare

Title DRILLING SUPERINTENDENT

Date 11/16/99

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by David R. Glass

Title PETROLEUM ENGINEER

Date NOV 16 1999

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

Casing Summary

Casing Size	Set From	Set To	Csg Wt lbs/ft	Casing Grade	Casing Coupling	Torque ft-lbs	Hole Size	API Burst	Pipe Collapse	Ratings Tension
20"	0'	350'	94.0	H-40	BTC	Triangle	26"	1,530	520	1,041,000
13-3/8"	0'	1,100'	48.0	H-40	STC	3220	17-1/2"	1,730	770	322,000
13-3/8"	0'	1,255'	54.5	K-55	STC	5470	17-1/2"	1,730	770	322,000
9-5/8"	0'	3,200'	36.0	K-55	LTC	4890	12-1/4"	3,520	2,020	561,000
5-1/2"	0'	4,500'	20.0	L-80	LTC	4200	8-3/4"	9,190	8,830	428,000
5-1/2"	4,500'	9,800'	17.0	L-80	LTC	3410	8-3/4"	7,740	6,280	348,000
5-1/2"	9,800'	11,500'	20.0	L-80	LTC	4200	8-3/4"	9190	8830	428000

Casing Size	Csg Wt lbs/ft	Set To	Mud Wt When Set	Frac Grad At Shoe	Pore psi At Shoe	Pmax Surf psi	Calc Burst	Safety Collapse	Factors Tension
20"	94.0	350'	9.4	0.60	147	222	8.22	3.06	37.0
13-3/8"	48.0	1,100'	10.2	0.66	515	711	2.47	1.25	6.00
13-3/8"	54.5	1,255'	10.2	0.66	587	711	7.97	1.68	114.0
9-5/8"	36.0	3,200'	10.4	0.7	2410	1365	2.29	3.47	3.19
5-1/2"	20.0	4,500'	9.9	0.7	5148	4850	2.01	7.2	2.09
5-1/2"	17.0	9,800'	9.1	0.7	5148	4850	1.57	6.84	2.77
5-1/2"	20.0	11,500'	9.8	0.7	5148	4850	1.75	32.03	9.09

Remarks: Clean, drift, and visual end area inspection on all casing after arrival on locatrion. Run a four-point inspection on the intermediate and production casing prior to shipping from yard to location.

Cementing Summary

Contractor: Halliburton

20" Structural Casing

1st Stage Lead Slurry: Premium Plus + 2% CaCl2 + 1/4 lb/sk Flocele

From Depth	Planned TOC	Stage	Hole Size	% Excess	Density ppg	Yield ft3/sk	Mix Water	Qty Sx	Pump Time	FL cc	FW %	12 Hr psi	24 Hr psi
350'	0'	Lead	26	100	14.8	1.34	6.30	850	3:20	790	0	550	960

Remarks: Refer to actual cement recommendation. Use 100% excess.
Float Equipment: Guide Shoe, Stab-in Collar[Weatherford-Gemoco]
Centralizers: Middle of Shoe Jt. & Every Other Jt. to Surface [Weatherford-Gemoco]

13-3/8" Surface Casing

1st Stage: Lead Slurry: Halliburton Interfill Premium Plus + 0.25 lb/sk Flocele
Tail Slurry: Halliburton Premium + 2% CaCl2

From Depth	Planned TOC	Stage	Hole Size	% Excess	Density ppg	Yield ft3/sk	Mix Water	Qty Sx	Pump Time	FL cc	FW %	12 Hr psi	24 Hr psi
1,000'	0'	Lead	17-1/2"	50	11.9	2.46	14.28	550					
1,255'	1,000'	Tail	17-1/2"	50	14.8	1.34	6.31	250					

Remarks: Refer to actual cement recommendation. Use fluid caliper + 50% excess.
Float Equipment: Float Shoe, 2- Shoe Joints, Float Collar [Weatherford-Gemoco]
Centralizers: Middle of shoe joints, every 4th jt. to include into surface casing shoe.[Weatherford-Gemoco]

9-5/8" Intermediate Casing

1st Stage: Lead Slurry: Halliburton Light Premium Plus + 0.3% CFR-3, 0.2% Econolite + 6.0 lb/sk Salt
Tail Slurry: Halliburton Premium Plus + 0.2% Econolite

From Depth	Planned TOC	Stage	Hole Size	% Excess	Density ppg	Yield ft3/sk	Mix Water	Qty Sx	Pump Time	FL cc	FW %	12 Hr psi	24 Hr psi
2,700'	0'	Lead	12-1/4"	50	12.4	2.11	11.71	740					
3,200'	2,700'	Tail	12-1/4"	50	14.8	1.32	6.29	250					

Remarks: Refer to actual cement recommendation. Use fluid caliper + 50% excess.
Float Equipment: Float Shoe, 2- Shoe Joints, Float Collar [Weatherford-Gemoco]
Centralizers: Middle of shoe joints, every 4th joint to include into surface casing shoe.

5-1/2" Production Casing

Stage Collar Depth: 9000'(Approximate)

1st Stage: Lead Slurry: Modified Super H + 0.4% CFR-3 + 5 lb/sk Gilsonite + 0.5% HALAD-344 + 1 lb/sk Salt + 0.2% HR-7
2nd Stage: Lead Slurry: Halliburton Interfill Premium Plus + 0.25 lb/sk Flocele + 3.0 lb/sk Gilsonite + 0.2% HALAD-322
Tail Slurry: Halliburton 50/50 Premium Poz + 0.6% HALAD-9 + 2.0% Gel + 3.0 lb/sk KCl + 5.0% MicroBond

From Depth	Planned TOC	Stage	Hole Size	% Excess	Density ppg	Yield ft3/sk	Mix Water	Qty Sx	Pump Time	FL cc	FW %	12 Hr psi	24 Hr psi
11,500'	9000'	Lead	8-3/4"	30	13.0	1.67	8.27	725					
9,000'	8600'	Tail	8-3/4"	30	14.8	1.35	6.04	100					
8,600'	Surface	Lead	8-3/4"	30	11.9	2.47	14.00	1105					

Remarks: Use open hole caliper volume plus 30% excess.
Float Equipment: Float shoe, 2 shoe joints, float collar, DV tool @ 9000' [Weatherford-Gemoco]
Centralizers: Middle of shoe jt., every 4th jt. to DV collar, 1 below & above DV collar then every 4th jt. into int. csg. [Weatherford-Gemoco]

Wellhead Summary

Component	Description	Casing Hanger Type
"A" Section (Casinghead)	13-5/8" x 3M x 13-3/8" SOW w/2" LPO & bullplug(NoTrim)	9-5/8" slips
"B" Section (Casinghead)	13-5/8 " x 3M x 11" x 5M w/2-FGV's(All H2S Trim)	5-1/2" slips
"C" Section (Tubinghead)	11" x 5M x 7-1/16"x5M w/ 2-FGV's (All H2S Trim)	tubing hanger

Remarks: Requirements : API Monogram all wellhead equipment. "A" Section will be sweet service, "B" & "C" Sections will be sour service.